

# General Maintenance Instructions

## 1. Maintenance of Marshalls polyester powder coatings on steel or stainless steel

As with any organic coating, in order to retain the aesthetic qualities and the long term durability of the system, it is important that the coating is cleaned regularly.

The frequency of cleaning depends upon the environment in which the polyester coating is in service.

For areas of "normal" urban environment we recommend a maximum period of 18 months between cleaning operations, unless undue soiling is apparent on the coating, in which case cleaning should be more frequent. In areas of high pollution, marine and swimming pool environments cleaning should be carried out every three months.

A polyester coating can be cleaned using a solution of mild detergent in warm water. All surfaces should be cleaned using a soft cloth, sponge or a natural bristle brush. Abrasive materials should be avoided as they will damage the coating. If the polyester coating has become badly soiled and it is difficult to remove the "soiling", repeated cleaning may be required. In order to assist this problem, several commercially available cleaners have been tested; Ajax Cream, Liquid Gumption, Flash in water, Ajax Liquid in water. While tests show that products of this type may be used successfully in the removal of heavy surface deposits, particular care must be exercised in their use to avoid any scuffing of the powder coating film. It is recommended that in all cases, such products are reserved for heavy soiled coatings only and should be tested on a small area first to assess their efficiency. After application all detergents and cleaners must be thoroughly rinsed away with clean water, ensuring there is no risk of pollution to the surrounding area.

*The information contained here has been provided by H B Fuller Company and should be considered as current best practice only. Should you be unsure as to the suitability of any commercially available cleaner always check with the product manufacturers.*

## 2a. Care and maintenance of Marshalls stainless steel street furniture products

Stainless steels are selected in applications where their inherent corrosion resistance, strength and aesthetic appeal are required. However, dependent on the service conditions, stainless steels will stain and discolour due to surface deposits and so cannot be assumed to be completely maintenance free. In order to achieve maximum corrosion resistance and aesthetic appeal, the surface of the stainless steel must be kept clean. Provided the grade of stainless steel and the surface finish are correctly selected, and cleaning schedules carried out on a regular basis, good performance and long service life will result.

## 2b. Factors affecting maintenance

Surface contamination and the formation of deposits must be prevented. These deposits may be minute particles of iron or rust from other sources used on the building of new premises and not removed until after the stainless steel items have been fixed. Industrial and even naturally occurring atmospheric conditions can produce deposits, which can be equally corrosive, e.g. salt deposits from marine conditions.

Working environments can also provide aggressive conditions such as heat and humidity, in a swimming pool building. Proprietary solutions, when used in accordance with makers' instructions, should be safe but if used incorrectly (e.g. warm or concentrated), may cause discolouration or corrosion on stainless steels. Strong acid solutions are sometimes used to clean masonry and tiling of buildings.

These acids should never be used where contact with metals, including stainless steel is possible, but if this happens, the acid solution must be removed immediately, followed by dilution and rinsing with clean water.

## 2c. Maintenance programme

With care taken during fabrication and installation, cleaning before "hand-over" should not present any problems. More attention may be required if the installation period has been prolonged or hand-over delayed.

Where surface contamination is suspected, immediate cleaning after site fixing should avoid problems later. The frequency of cleaning is dependent on the application; a simple rule is; "Clean the metal when it is dirty in order to restore its original appearance". This may vary from once to twice a year for external applications. Street Furniture products need careful handling, installation and maintenance. Tooling and fixings should be stainless steel.

Products should only be unpacked for the required root/base length with the upper packaging left on until installation complete.

## 2d. Cleaning methods

Stainless steel is easy to clean. Washing with soap or mild detergent and warm water followed by a clear water rise is usually quite adequate for Street Furniture. For stubborn stains apply a non bleach cream (e.g. Cif\*) with a paint brush and rub with a clean cloth or a soft plastic brush (car wash type) then rinse thoroughly with clean cold water. Where stainless steel has become extremely dirty with signs of surface discolouration (perhaps following periods of neglect, or misuse) alternative methods of cleaning will be required. The installation area should be free of any rusty items, particles from which may be deposited on the stainless steel product giving the 'appearance' of rusting and can be removed by cleaning using a product such as Resin Neutraliser by Wurth ref 890 71.

The products referenced in this information sheet are understood to be suitable for stainless steels. However, no endorsement of the products or their manufacturers is implied and it is acknowledged that other manufacturing companies may provide products of equal or better quality. The following companies manufacture proprietary cleaners;

\*\*Cif" (Jif) – Lever Brothers Ltd

\*\*Shiny Sinks" – Home Products Ltd

\*\*Ajax" – Colgate Palmolive Ltd